Kmesh Community Meeting Notes

	Kmesh Community Meeting
Leads	
Discussion Forum	
Slack Channel	
Design Docs	Team Drive Folder
Meeting Recordings	
Meeting Schedule	
Meeting Link	
Roadmap	

- Reminder:
 - Record this meeting!
 - Please add your agenda!
- Next Meeting

Dec 11, 2025

- [Release v1.2.0]
 - o It has been officially released.
 - o Release Release v1.2.0 · kmesh-net/kmesh
- [Dash Board]
 - Kiali
- [Kubecon]
 - Maintainer truck
 - Project Opportunities
- [LFX May-March]
 - Open an issue to call for topics
 - Support Kmesh dash board

Dec 04, 2025

• [Release v1.2.0]

- o Release v1.2 · Issue #1547 · kmesh-net/kmesh
- Release v1.2.0-rc.0 has been publish. <u>Release v1.2.0-rc.0</u> · <u>kmesh-net/kmesh</u>
- [Good First Issue]
 - A few international friends have expressed their desire to participate in the Kmesh community. However, there are indeed few entry-level tasks available.

0

- [Issue of locality load balance]
 - Has been fixed by <u>Fix waypoint address missing in ebpf/endpoints</u> when <u>LocalityInfo is nil by Copilot · Pull Request #1534 ·</u> kmesh-net/kmesh
- [Reduce CPU Usage when update Cluster]
 - During upgrades in large clusters, full configuration deployment can lead to an increase in Kmesh CPU usage.
- [dashBoard]
 - o Can do some research
 - o kiali?

0

Nov 27, 2025

- [Release v1.2]
 - First Publish release v1.2, then publish release v1.2.1 after the bug fixes in the pull request are completed.
 - adapt 6.6 by lec-bit · Pull Request #1520 · kmesh-net/kmesh After compiling `enhance`, problems will occur.
- [istio 1.27 patch release]
- [locality load balance]
 - Lose a test case

Nov 20. 2025

- [Release v1.2]
 - Block by adapt 6.6 by lec-bit Pull Request #1520 kmesh-net/kmesh
- [E2E]
 - No space
 - o Clean up image
 - o Split the e2e test

•

Nov 13, 2025

• [Release v1.2]

Nov 6, 2025

- [Release v1.2]
 - Adapt 6.6 kernel
 - o Dns proxy
 - Support serviceEntry
 - Zero-Downtime upgrade
 - o Circuit breaker and local rate limit in dual engine
 - Adapt istio 1.26 and not support istio 1.23
 - o Release Note: Kmesh Release v1.2
- [Kubecon EU maintainer Track]
 - o DDL Dec.14
 - One lighting talk and an exhibition booth
- []

Oct 30, 2025

- [OSPP]
 - o Ddl 10.31
 - o Some outstanding issues will need to be addressed at a later date.
- [Fossa]
 - o It has been clarified that this was a false alarm.
- [CI Error]
 - o Caused by Ubuntu 22.04
- [maintainer]
 - o Join CNCF project maintainer list

0

Oct 23, 2025

- [OSPP]
 - Some students still have pull requests that haven't been merged.

0

- [Fossa]
 - This error prevents the automatic merging of PRs.
 - Communicating with CNCF personnel
- [istio 1.27]
 - o adapt istio 1.27

- fix: should specify root namespace for envoyfilter policy matcher by YaoZengzeng Pull Request #58032 istio/istio
- [Release v1.2]
 - o Early November

•

Oct 16, 2025

- [KubeCon Kmesh Project Equity]
 - A lighting Talk
 - o A Booth
- [adapt istio 1.26]
 - o Done
 - Adapt istio 1.27

•

Oct 9, 2025

- [istiod delete context of envoyfilter]
 - o Istio version 1.26
- [release v1.2]
 - o The end of Oct.
- [waypoint]
 - o Lack of source IP address

0

Sep 25, 2025

- [Kubecon EU 2026]
 - o CFP close on 12, Oct
 - welcome everyone to submit relevant topics.
- [Orion] istio + orion
 - Orion can run as sidecars for istio bookinfo app

0

- [Kmesh support istio version] istio version > 1.25
 - Check the behavior of istio in generate workload

Sep 18, 2025

• [orion]

Sep 11, 2025

- [Orion] Adapting Orion to Kmesh and replacing Waypoint
 - [LFX-2025-Sep-Nov] Kmesh Orion replace waypopint · Issue #1450 · kmesh-net/kmesh
 - Application Layer | Kmesh Test the existing functionality of Kmesh's user guide and supplement the corresponding documentation.
 - Division of Responsibilities
 - Kmesh developers test the functions, and orion developers develop and adapt the functions and compile the user guide?
 - Or any other solution

0

Sep 4, 2025

- [IPsec Issue] huanghaobin
 - Has been fixed
- [serviceEntry] mengyuan
 - Has been merged
 - A patch release
- [CNCF onboarding] huanghaobin
- [integration of istio and orion]
- Kmesh release v1.2
 - o orion?
 - o OSPP
 - Service Entry
 - o Rate limit and circuit breaker of Dual engine mode

Aug 28, 2025

- [IPsec issue] huanghaobin
 - Need to confirm that the parse processing is generic

•

Aug 21, 2025

- [OSPP]
 - o Mid-term assessment next week.
- [Feature]
 - Use Cases for Kmesh global rate limit
 - dual-engine user case with waypoint support for circuit breaker and rate limit
 - User case for ingress gateway
 - o mTls
- [IPSec bug]
 - Some issues encountered in writing Ipsec E2E tests · Issue #1481 · kmesh-net/kmesh
- [e2e author question]
 - Problems encountered in writing E2E authentication policy tests
 Issue #1490 · kmesh-net/kmes

Aug 14, 2025

- [Kmesh IPsec]
 - Some issues encountered in writing Ipsec E2E tests · Issue #1481 · kmesh-net/kmesh

0

- [LFX membership]
 - o Mentee applications are closed
 - Mentors have until the 26th to select mentee
- [DNS interception]
 - o Building ip tables with serviceCache.
 - o combining sidecar and ztunnel schemes
- [OSPP] e2e test
 - Add a docs about differences between Kmesh and istio configuration semantics

Aug 7, 2025

- [OSPP] e2e test supplement
 - IPSec failed
 - Submit an issue.
- [dns interception] @Kuromesi
 - o Dns resolver

•

Jul 24, 2025

- [LFX] Sep-Nov
 - [LFX-2025-Sep-Nov] Improving Ipsec's Stability and Ease of Use Issue #1457 · kmesh-net/kmesh

- [LFX-2025-Sep-Nov] Kmesh Orion replace waypopint · Issue #1450 · kmesh-net/kmesh
 - Use xds communication with the control plane
 - Capacity of traffic management
- [dns interception] @Kuromesi
 - Kmesh supports dns interception and resolution · Issue #1451 · kmesh-net/kmesh
 - Use cgroup connect hook point

0

- [OSPP] Gaoxiaojian
 - o The semantics of allow authorization differ from those of istio
 - Update helm charts
- [OSPP] wuxi
 - Service manager check in IPv6

0

Jul 24, 2025

- [OSPP] mahaoyuan
 - o Determine when not to do bpf map reconstruction
 - How to rebuild bpf map
- [ali cloud] serviceEntry
 - Supplemental dns intercept operations
- [OSPP]e2e test
 - o Ip header and service is ready
- [OSPP] e2e of ebpf
 - Skb packet
- [Orion] Adaptation testing

С

Jul 17, 2025

- [OSPP] Yash Israni
 - The Kmesh website automation capacity building and documentation optimization
- [OSPP] wuxi
 - UT Supplement to the Kmesh eBPF program

•

Jul 10, 2025

- [OSPP] mahaoyuan
 - The proposal of Kmesh-daemon upgrades traffic without disruption
- [OSPP] gaoxiaojian
 - o IPSec & Offload Authorization E2E Test Proposal
- [OSPP] caoyusen
 - Verifying and Complementing Kmesh Feature
- [Orion]
 - o Follow-up on the donation of Orion
 - All maintainers have voted in approval

Jul 3, 2025

- [Kick-off meeting of Kmesh OSPP] lizhencheng
- •

Jun 26, 2025

- donate Orion to Kmesh Dawid Nowak https://github.com/kmesh-net/community/issues/14
 - o Will vote after community meeting
 - Replace waypoint still need some work to do

C

- [OSPP] lizhencheng
 - Sync progress weekly

0

Jun 19, 2025

- [donata Orion to Kmesh] Dawid Nowak
 - Let's discuss it again next week

0

• [OSPP]

- mentor review stage
- o DDL: 6.20
- [authz]
 - do authorization in waypoint if have waypoint
 - else handle it in XDP

lacktriangle

Jun 12,2025

• skipped due to maintainers attending KubeCon China 2025.

Jun 5, 2025

- [OSPP] lizhencheng
 - o DDL: Jun 9
- []

May 29, 2025

- [OSPP] lizhencheng
 - [Kmesh website automation capacity building and documentation optimization]
 - [UT Supplement to the Kmesh eBPF program] wuxi
 - [Kmesh supports multi-clusters]
 - o [Kmesh-daemon upgrades traffic without disruption]
 - o [E2E of IPSec and offload Authorization] gao xiaojian
 - [Verifying and Complementing Kmesh Feature] cao yusen
- [release v1.2]
 - Feature Support:
 - Fault recovery
 - add the tool to quickly exit at the prog entrance
 - Offload Authorization
 - Network segment-based authorization
 - Mtls?(after questioning and deciding)

_

- Complement extension capabilities:
 - support dns service Entry[dual-engine] mengyuan
 - support rate-limit and circuit breaker
 - 1.24 istio ambient support (envoy filiter)
 - add docs
 - IPsec
 - Enhanced stability
 - Simplified configuration

_

May 22, 2025

• [OSPP] lizhencheng

C

May 15, 2025

- [release 1.1]
 - o published
 - o TODO:
 - new release news(yaozengzeng)
 - Archiving of old documents (create an issue)
 - https://github.com/kmesh-net/website/pull/180
 - Makefile Version (create an issue)
 - add release 1.1 in website recent news

- [offload auth conflict with waypoint] lizhencheng9527
 - There is a problem with setting Authorization for workloads in waypoint managed. Issue #1394 · kmesh-net/kmesh
 - o TODO:
 - check istiod version which service waypoint is nil

- [OSPP]:
 - Creating a issue and tracking tasks
 - o IPSec
 - xiaojian gao has submit a proposal

- [Zoom]
 - https://zoom-lfx.platform.linuxfoundation.org/meeting/99299011908?pa ssword=f4c31ddd-11ed-42ae-a617-3e0842c39c58
 - o readme ... meeting link need to update

May 8, 2025

- [ebpf unit test] tianzhenxiong
 - More detailed documentation
- [bpf_trace_printk] zhangmingyi
 - o dual-engine mode is not affected
 - o kernel-native mode is affected in high-concurrency.
- [release v1.1]
 - bug fix
 - Kmeshctl v1.1.0-alpha long connection · Issue #1366 · kmesh-net/kmesh

0

- [OSPP]
 - The projects has been published

April 24, 2025

- [release 1.1]
 - o release Note: (Done)
 - o alpha release: (TODO)
 - Kernel-Native Mode Monitoring: delay

0

- [ospp] Verifying istio functionality at kmesh dual engine mode.
 - Analyze what is missing
 - Documentation of usage examples for existing features
 - locality load balance
 - o circuit breaker
 - o rete limit
 - Ingress
 - o engress

0

- [OSPP] Zero down time during upgrade if bpf map does not change
 - mentor: xuzhonghu
 - o need to compare the map structure
 - o ask: wuchangye/liuxin
- [OSPP] IPsec e2e and offload authorization and user guide docs
 - o mentor: yaozengzeng/liwei
- [OSPP] support multi-cluster
 - o TBD
- [OSPP] Monitoring
- [OSPP] region related flags (mengyuan)
- [LFX] Periodic sync status

April 17, 2025

- [long connection metrics] Do we need to create a few new metrics to represent the metrics for long connections?
 - feat: added new prometheus metrics for long conn by yp969803 · Pull Request #1305 · kmesh-net/kmesh
 - Use original workload metrics refresh function.
- [release 1.1]
 - release note (yaozengzeng)
 - o support istio 1.25(done)
 - webiste refactor (done)
 - o long connection metrics (function done)
 - o dns refactor(done)
 - kernel native metrics(L4 done)
 - use global variable optimise bpf config map (done)
 - Optimise kernel native mode to reduce intrusive modifications to the kernel. (done)
 - o bug fix
 - kmeshctl install waypoint error (fixed)
 - kmesh restart (fixed)
 - o DDL: 25 April
- [OSPP]:
 - o ddl of submit proposal : May 4
 - o UT, E2E, Docs
 - o [gaoxiaojian]:
 - want to develop new features

- [LFX Term 02 2025 Jun Aug]
 - April 16 Tue, May 13
 - ∘ **E2E**、
 - participate

Kmesh control plane?

April 10, 2025

- [ebpf unit test] tianzhenxiong
 - o Finished the framework and XDP for UT
- v1.1
 - o long connection metrics
 - kernel native mode
- LFX
 - o mid review

•

April 3, 2025

- [restart flask] yaozengzeng
 - o function bpf_map_update_elem doesn't work as expected
 - o 5.10->6.x

0

- [kubecon NA]
 - o Submissions of CFP are open.

0

- [kernel native metrics] zhangmingyi
 - L4 finished

Mar 27, 2025

- [IPsec cannot work properly in Kind clusters]
 - o IPsec e2e
 - o istio version 1.20->1.23/1.24

0

- [OSPP]
 - 4.4-5.4 Submission of topics
 - o mentees contacts
 - o six topics

0

- [yash]
 - draw a picture about your design and update to long connection metrics proposal.
- [adapt istio 1.25] yaozengzeng

submit an issue first

0

- [website]
 - Add Recent News
 - o submit new PR to merge 'change-theme' to 'main'
- [release 1.1]
 - o April 11
 - o progress of mtls
 - o hyper tls landing kmesh

C

Mar 20, 2025

- [OSPP] Complete community enrollment
 - call for topics [2025 OSPP] Kmesh's OSPP projects declaration · Issue #1281 · kmesh-net/kmesh
 - change log in the official website
- [eBPF UT test] zhenxiong tian
 - o LFX project
 - update eBPF unit test by sancppp · Pull Request #1267 · kmesh-net/kmesh
 - The UT framework is almost complete
 - The framework is divided into three parts: generating test packages, executing tests and checking test results.
 - mentor: mingyi or muyang
 - zhenxiong tian: Split PRs, split proposal, Framework, specific unit tests into small PRs
- [yp969803]:
 - o Attaching to program
 - o Plan to keep website latest

- [e2e flask in ali cloud] mengyuan
 - o They're all known issues.
 - add channel for Rbac when Kmesh restart by weli-l · Pull Request #1275 · kmesh-net/kmesh

Mar 13, 2025

- [kubecon China] Statistics of selected CFP
 - o [mingyi] lighting talk
 - o [yinhang lizhencheng] lighting talk
 - o [zhonghu songyang] two 30 presents

0

• [OSPP] Collection of issues

0

- [Pretty print config dump]
 - o Pretty print config dump · Issue #1270 · kmesh-net/kmesh
 - /assign [mengyuan]

С

- [mtls] hyper tls
 - o [muyang]
- [build issue] Compilation and building adjustment —-zhangmingyi
 - Create a new folder for the compilation products
 - Modifying the base image
 - o ko files are compiled on the host machine
- [auth offload] Whether enable auth offload by default —liwei
 - o Resident on

Mar 6, 2025

- [Kmesh webiste] Jayesh Savaliya
 - o requests:
 - double-click the picture to enlarge
 - add kmesh website into google analytics
 - Switching between different releases of docs
- [Suggestions for keeping website latest] yp969803
 - o proposals still in kmesh repo
 - descriptive docs migrated to the website repo
- [Userspace auth incorrectly deny connection when Kmesh restart] yaozengzeng
 - o add a flag that the user space of kmesh is ready after the restart.
 - when the policy is empty, the user space processing is not used.
 - https://github.com/kmesh-net/kmesh/blob/main/pkg/auth/rbac.go#L184
 - vote: if dstworkload not be found when kmesh-daemon is restarted, deny or allow this conn?
- [mtls]
 - o xin liu is responsible for this feature

- [ebpf global var]
 - o init when kmesh-daemon update

•

Feb 27. 2025

- [yp969803] Tcp long conn metrics projects
 - Review of kernelspace and userspace code on pr https://github.com/kmesh-net/kmesh/pull/1249
 - Org_dst problem: according to me based on my ebpf code, i think i have solved it
 - o Intructions from the maintainers to compile and run ebpf code
 - Upcomming plans and implementations for the project
- [LFX]:
 - Email of acceptance of mentees has been sent
- [failed to set xdp to dev eth0]:
 - o /assign tianmuyang
- [e2e restart flaky]
 - o due to the istiod connection pool.
 - o add retry policy
- [e2e authorization flaky]
 - o optimizie xdp auth by weli-l · Pull Request #1256 · kmesh-net/kmesh

Feb 20. 2025

- [Kubecon China and Japen]:
 - lighting talk
 - o ddl 2.23

0

- [LFX 2025 first term]:
 - It's already at the stage of selecting mentee.
- [authorization e2e]:
 - WIP: E2E test case for Kmesh L4 authorization by YaoZengzeng · Pull Request #641 · kmesh-net/kmesh
- [Kmesh Al meeting]
- [restart e2e test flaky]

Feb 13. 2025

- [Kmesh 1.1 release feature]:
 - o expected release data: 28 March
 - o feature:
 - mtls(priority support dual engine)
 - IPsec e2e test

- ebpf global var
- kernel native adapt
- egress and dns refactor

C

- [zhangmingyi] kmesh kernel native mode enhanced kernel refactoring, forward incompatible, no longer compatible with native oe2303
 - support kernel version:
 - L4 not need kernel patch
 - L7 still need kernel patch
 - linux 6.6 kernel does not need to be patched
 - o conclusion:
 - >1.0 release old kernel patches are no longer archived
 - kmesh/kernel/patches/5.10.0 at release-1.0 · kmesh-net/kmesh
- [liwei] TODO: e2e test of authorizaiton
- [Al gateway]:
 - o gateway api inference extension

0

Feb 6, 2025

• [This regular Kmesh community meeting has been suspended this week.]

Jan 30, 2025

• [This regular Kmesh community meeting has been suspended this week due to the Chinese Lunar New Year.]

Jan 23, 2025

- [kubecon CN 2025]
 - o ddl Feb 2nd
- [yaozengzeng] Kmesh authz offload
- [LFX]:
- [restart without interruption]: structure has not changed.

Jan 16, 2025

- [yaozengzeng] Al Plugin API review
 - o immediate response can't stream return results.
 - Head and body are sent separately
 - virtualMode and destinationRule
 - o model config?
- [LFX] ([Ifx-mentorship-2025-Mar-May] Kmesh's LFX project declaration · Issue #1169
 kmesh-net/kmesh)
 - bpf prog ut test [liuxin]
 - dual-engine e2e test [yaozengzeng]
 - docs [lizhencheng]
 - o locality log [xuzhonghu]?

- 2025 road map
 - o Multicluster

https://docs.google.com/document/d/1Wg6sx9ZUJL4AsHj5wM1kMx3E436s5wg2qoMqol-bqbQ/edit?tab=t.0#heading=h.ppr0kg59hrq3

Network policy [cilium xuzhonghu]

Jan 9, 2025

- Kubecon China 2025
 - o ddl 2.2
 - 0
- LFX mentoring
 - o full-time schedule
 - o submit a topic
 - The way of operating in the community needs to be optimised (need a issue template)
 - o ddl 2.4
- 2025 road map
 - mtls
 - need end user requests
- Publicize:
 - Use LFX to gain a good reputation among foreign developers
 - \circ v10
 - o Kmesh release v1.0 Google 文档
- [zhangmingyi] kernel-native L7 Traffic control optimize
 - Reduce intrusive modifications to the kernel
 - o target: No need to hack the kernel in 6.6 kernel version
 - submit a doc about kernel patch with kernel version
 - Contribute to the linux kernel community
- [liuxin] IPsec
 - Adaptation to some special usage scenarios.
 - o problem:

- There is already a link when starting Kmesh. In case of a short connection there will be a small percentage of links failed.
- Fine-grained socket control required

- Need reviews
- [xuzhonghu] kmesh manager:
 - o Consider only pods on Kmesh's own node

Jan 2, 2025

- release v1.0
 - o with alibaba publicize
 - o with CNCF donation publicize

DEC 26, 2024

- [yaozengzeng] Al Plugin API review
 - o model hostname or only gateway hostname
 - Description of existing proposal
 - More relevant to real-world usage scenarios

0

- [lizhencheng] egreess
 - Service and workload address conflict
 - if a conflict occurs during workload and service in frontend map, not writing.
 - Frontend map residue when serviceEntry address changes
 - compare addresses in new service and old service
- v1.0 blockers:
 - o Kmesh enable ipsec by bitcoffeeiux · Pull Request #1030 · kmesh-net/kmesh
 - o auth of ip support xdp auth of IPs by weli-l · Pull Request #1095 · kmesh-net/kmesh
 - get authz before workload in xdp
 - collaboration problem with userspace
 - proposal need update
 - OSPP need test

DEC 19, 2024

- [lizhencheng] egress and serviceEntry
 - TODO: check ambient REGISTER_ONLY and ALLOW_ANY
 - TODO: add dns resolution logic
- [zhangmingyi] kernel-native mode enhanced kernel lack of machine to build and run E2E

- o TODO: ads L4 e2e
- o TODO: submit en issues to github: add OE os
- [xuzhonghu] observability
 - Monitoring of unknown services
 - should add block or pass in accesslog.
 - add connect failed metrics:
 - already had.

- orion open source schedule: 2025
- [mengyuan]: Kmesh Metric
 - Modification of destination services in metric
 - TODO: headless service scenarios
- Documentation of OSPP's features required in new releases.

DEC 12, 2024

- [xuzhonghu] kmesh benchmark
 - Kmesh vs Ambient
 - CPU resource consume
 - scripts link:playground/performance_test/test.sh at main · hzxuzhonghu/playground
 - o [need link]
 - TODO: disable keepalive test: Done
 - L4 Kmesh better than ambient mesh(1/3)
 - L7 Kmesh better than ambient mesh (1/4). Not much difference at high concurrency
- [xuzhonghu] Structured Log
- [lizhencheng]:
 - support.md update
 - cgroup_connect4_prog doesn't trigger
- [mengyuan]:
 - o blog update
 - kiali need more address info. Need add per address in cgroup connect

DEC 5, 2024

- [lizhencheng] bpf map rename
 - o Issue #1081
 - o add a description doc
 - o reply directly in issue
- [lizhencheng] increase the dimension of the metrics
 - o <u>issue #1091</u>
 - rtt_min & total_retrans & lost_out
- [liuxin] ipsec
 - o PR #1030
 - kmeshNodeInfo: Contains information about all kmesh nodes in the cluster

- Same node will not be encrypted
- o spi does not require strong synchronisation
- Linearly increasing policy
- The wireguard is not mature enough.
- supported network adapter types

0

- installation guide needs update
 - o <u>Issue #1082</u>
- [yaozengzeng] serviceEntry
 - o add map field to store endpoint-exclusive ports
 - o Optimise the structure.
- [xuzhonghu]
 - Log Placeholder Replacement

NOV 28, 2024

- [yaozengzeng] Al Gatweay design & demo
 - o Al Plugin
 - o Compatible with various AI gateways given to envoys
 - flexib

0

- [lizhencheng] support Headless service
 - o problem:
 - refer to ztunnel how to select destination_service
- [xuzhonghu] backend manager countercheck Compare Service
- [liwei] authz debug log
 - Missing namespace and identity information
 - Missing message that authz was reset
- [shunfeng]
 - o fear
 - Kernel version too high
 - observability
 - Smooth migration

NOV 21, 2024

- [zhangmingyi] kernel native monitoring:
 - o apply proposal
- [hang yin] Improve the compatibility of Kmesh observability with the Istio ecosystem
 - Timed erasing (no longer need)
 - o Add metric trigger to facilitate performance testing
 - o Problem:
 - kiali need ztunnel to collect waypoint metrics
- [wcy] read-write conflict:
 - o have lock protect
 - o usespace hace a flag to controller add lock
 - o There is no exception for reading an nil map
 - o problem:
 - There will be dirty reads.
- [wcy] bpf loader failed:
 - o optimise BPF_LOG
 - o init variables in bpf.
- [zhangmingyi]
 - o large-scale need a issue
- [yaozengzeng] adapt isito 1.24
 - o 1.24.1 e2e

0

NOV 14, 2024

- [Zhonghu xu] bpf map update order https://github.com/kmesh-net/kmesh/issues/1042
 - should: backend map-> endpoint map-> service map->frontend map now: endpoint map-> service map->backend map->frontend map
 - [wcy] Share map in map optimization
 - o use macros to define data type
 - o define the data size based on the data length used by kmesh
 - o optimize:
 - use the cache to store the key is used.
- [zhangmingyi] kernel native monitoring:
 - kernel native monitor
 - remaining problem:
 - get http destination service and response code
 - where to mount hook point?
- [hang yin] Improve the compatibility of Kmesh observability with the Istio ecosystem
 - o clean metrics at a certain time.
 - rename exposed metrics (prefix 'kmesh_' -> 'istio_')
- [liwei] xdp auth in tailcall
 - Data Dirty Reading
 - Deletion problems with hashmap
- [liuxin] ipsec:
 - o TODO: Supports different container networks
 - o work in duel engine.

NOV 7, 2024

- [wcy] Share map in map optimization
 - o Fixed Maximum length of value leads to wasted resources.
 - To support large scale, memory space is reserved, resulting in more consumption at startup.
 - o optimise:
 - A set of fixed-size maps: sizeof value: 64, 128, 1024, 8192
 - Select the map according to the length of the information
 - use map_type + index to locate information
 - remaining problem:
 - bpf verify returns out of memory with multiple maps
 - support prt -> multi index
- authz read/write consistency issues
 - There may be a problem with user space writes conflict reads from the kernel bpf program.
 - Link Level Authentication Issues.

0

OCT 31, 2024

- Alibba has run kmesh successfully in ali cloud.
- 开源之夏: 完整度, 设计文档, 代码, 测试 doc, create a issue to track undone task
 - ebpf perf monitoring https://github.com/kmesh-net/kmesh/pull/887 no big blocker, need to pass the feature knob down to bpf.
 - consistent hash: https://github.com/kmesh-net/kmesh/pull/888/files lack of bpf implement
 - bpf test https://github.com/kmesh-net/kmesh/pull/920 sockops and cgroup/connect are not supported by framework?
 - ratelimit https://github.com/kmesh-net/kmesh/pull/859 : concurrent token fill need to be reviewed carefully
 - Circuit breaker https://github.com/kmesh-net/kmesh/pull/570 have been merged, missing doc
 - Dual Engine mode Locality LB https://github.com/kmesh-net/kmesh/pull/900 : has been merged, missing tests, documents

- Istio ambient multi network proposal https://docs.google.com/document/d/13c r1doDCoRoEHuxk eV8rnPi7X2pQgUWay9 KMSSUrs/edit?tab=t.0#heading=h.ppr0kg59hrg3
 - o what should we do with e/w gateway.
- istio 1.24 has behavior change on service.waypoint, we do overwrite the waypoint address from hostname to ip in kmesh-daemon

OCT 24, 2024

- lizhencheng: trace support in kmesh ebpf
 - tcp seq and thread id can be used to determine two packets belong to the same trace?
 - This may be not correct to assume req1->resp1 wcy
- lizhencheng: use a map to store all bpf prog global configs
- Whether to provide a istio yaml in kmesh to only install istiod
 - agreed, it is not a big deal, user would not use this to install when used in production.
- liuxin: kmesh encryption: tc need to know whether a packet should be encrypted
 - o maybe try sk storage
- mingyi: kernel native obsevability
 - o kmesh daemon lack of workload info
- release v0.5.1 in the next week

OCT 17, 2024

- https://github.com/kmesh-net/kmesh/pull/778/files bpf unit test framework
- https://github.com/kmesh-net/kmesh/issues/966 create a repo for DNS Capture feature
 - Agree to add the plugin repository.
- XDP authentication solution design discussion
 - Verify the feasibility of the tail call mode.
 - o Try bpf_loop.
- kmesh ipsec encryption solution discussion
 - Added restrictions, background, and advantages and disadvantages of the solution.
 - Specifies whether to retain the mark of the socket in the cross-namespace scenario.

OCT 10, 2024

- restart in ads mingyi
 - Add the ADS data processing process and mark the data that needs to be persisted.
 - Design data persistence policies and solutions.
 - Verify the feasibility of the solution based on the specific process.
- Start mode: kernel-native/dual-engine
- KmeshCtl:
 - support dynamic enable/disable kmesh feature
- sandbox vote

OCT 3, 2024

• canceled due to National Day

Sep 26, 2024

- v0.5.0 release
 - o https://github.com/kmesh-net/kmesh/pull/610
 - o release note

 $\frac{https://docs.google.com/document/d/1nWZR_Gk45CY9R9iNf0idBkbwipTZ0bgEU0cALgHv9MA/edit}{}$

 Release tasks and procedure https://github.com/kmesh-net/kmesh/issues/894

- Post release:
 - o some blogs on:
 - **■** zero-downtime during restart
 - performance: latency and cpu memory
 - obsevability
 - A series of blogs on kmesh traffic management features
- OSPP 2024:
 - o PR: Split Proposal and Implement
 - o Report: 9.30
 - Document
- Next release:
 - o ingress gateway:
 - o egress
 - o headless
 - o adapt to istio 1.24
 - observability: trace, metrics
 - o mtls
 - OSPP projects
 - Authorization offload xdp: on ip
 - o Kernel native mode: zero-downtime restart
 - o Serve specific use case: like Al

Sep 19, 2024

- v0.5 release
 - https://github.com/kmesh-net/kmesh/pull/610 ads scalability: 1. scale down fail, root cause has not been figured out 2. scale up crash
 - bpf log: update bpf2go.go to build two kind of .o, and kmesh daemon can load according to kernel version - tianmuyang
- add a access log knob in kmesh-daemon -lizhencheng

Sep 12, 2024

- [zhangmingyi] Control-plane and data-plane decoupling
- [Zhonghu] should we start mda bypass independently
 - Mda cannot collaborate with Workload Ads mode weibin
 - bypass can work alongside with workload/ads
 - option 1 we must specify ads/workload before using bypass, mda yaozengzeng
 - option 2 can use bypass/mda alone, later we can consider separate binary - xsy
- [] v0.5 release
 - o blocker https://github.com/kmesh-net/kmesh/pull/610
 - docker image cannot run on 5.10 kernel: bpf snprintf :
 - define structured log event: 3 day
 - workaround: turn off export log to usespace temporarily
 - Doc: 1. performance test report 2. restart will not influence application communication
 - o Plan: 9. 20

Sep 05, 2024

- consistent hash https://github.com/kmesh-net/kmesh/pull/394
 Proposal need to review
 - hash algorithm can be risky
- bpf log
 - export to userspace but can not be printed liwei
 - error code printed diff with bpf printk: https://github.com/kmesh-net/kmesh/issues/628
 - 5.13 compiled cannot be run in 5.10 kernel, cilium resolve by compiling before running+
- [muyang] protobuf oneof filed >=4, https://github.com/kmesh-net/kmesh/issues/702
 - first upgrade protobuf-c
 - o check how envoy do generate
- [yaozengzeng] Added kmeshctl https://github.com/kmesh-net/kmesh/issues/552

 Access log: how should we ignore readiness liveness probe https://github.com/kmesh-net/kmesh/pull/814

Aug 29, 2024

- kubecon questions about kmesh
 - support cross network access
 - huawei consumer cloud interested in performance
 - o how to implement locality aware lb
 - k8s service policy consistency
 - o other control plane supported?
- [hzxuzhonghu] v0.4.1 release
 - o release note: list bug fixes lizhencheng
 - build push image kmesh and waypoint
 - o enhanced kernel image can only run on oe2303
- kmesh 0.4.0 can not run in kernel < 5.13
 - https://github.com/kmesh-net/kmesh/issues/758
 - comment on issue: they need to compile image in kernel below 5.13
 - o investigate cilium liuxin
 - o consider support kernel 4.x: first workload mode
- [hzxuzhonghu] bpf map not correctly updated after kmesh restart
 - https://github.com/kmesh-net/kmesh/issues/789
 - o endpointKeys search slow, because it iterate all the endpoint map
 - https://github.com/kmesh-net/kmesh/pull/783 not sure which corner case is not correctly handled
- [yaozengzeng] Supported istio version 1.22+
 - o compatibility with istio
 - o istio has only 1.23 1.22 we supported now
 - o ads: no e2e, in theory it can support older istio, but we haven't tested it.
 - o ads >= 1.14
- [liujinyao] how to set workload locality and how to enable locality lb
- OSPP: organize a meeting next week to discuss the progress and challenges/blocker
 yaozengzeng

Aug 22, 2024

- [xsy] authz offloading
 - do rbac in xdp prog by supercharge-xsy · Pull Request #712 · kmesh-net/kmesh (github.com)
- [lzc] accesslog
 - add accesslog to enhance obversiblity of kmesh by LiZhenCheng9527 · Pull Request #732 · kmesh-net/kmesh (github.com) review

- [zmy] restart double prog
 - kmesh crash in kernel 5.10

C

Aug 15, 2024

- [xsy] authz offloading
 - o port match has been verified
 - o ip match need to redesign
 - add a new map to store workload's authorization policy
- [nlgwcy] support large scale for ads mode
 - manually manage map size scale up/down
- [yzz] L4 Metric name confusing _service_
 - o need lzc to confirm
- [yzz] Docs
 - Developer guide:Missing docs on how to debug : config dump and how to adjust log level, bpf map lookup
 - https://github.com/kmesh-net/kmesh/issues/733
 - How to manage workload with kmesh: https://github.com/kmesh-net/kmesh/issues/721

0

Aug 8, 2024

- [tian muyang] bpf coverage:
 - o integrate with bpf test framework, not run with e2e
- [zhangmingyi] after restart, we can see two progs attached https://github.com/kmesh-net/kmesh/issues/700
- [changye]https://github.com/kmesh-net/kmesh/issues/670
 - o mingyi: help add ut and resolve conflict
- [xsy] authz offloading is on developing
- Better renaming ads and workload mode:
 - o wcy: local and remote mode
 - yzz: Full Offload(全卸载) 和 Half Offload(半卸载)
 - zhonghu: Kernel Native(原生内核模式) Dual Engine(分层治理)
 - o Izc: Simple Mode and Advanced Mode
- [lin zihong] Feature circuit breaker
 https://github.com/kmesh-net/kmesh/pull/570
- [qijing] https://github.com/kmesh-net/kmesh/issues/702

Aug 1, 2024

- authorization offload -xsy
 - o map in map
- hostnetwork pod access linzihong
 https://github.com/kmesh-net/kmesh/issues/631
- Kind cluster: during restart, traffic is influenced yzz
- Service map flush: endpoint count unexpected zhonghu
- Kmesh dameon restart failed: caused by kmesh daemon cleanup not complete. - fixed

July 25, 2024

- [yuanqijing] ratelimit
 - https://docs.google.com/document/d/16rrxrKFhpExwgf6HL2J x58ZXsaTLs9BSr8fRjdYfl20/edit#heading=h.991af1q3sqyv
 - L4 ratelimit based on token bucket
- [liujinyao] locality load balance and healthy check
 - design a more efficient map instead of looping over all endpoints to pick one.
- [xiesongyang] Authz offload: possible to land down in v0.5
- [yzz] namespace manage : @yzz and @wcy
- Better renaming ads and workload mode:
 - o wcy: local and remote mode
 - yzz: Full Offload(全卸载) 和 Half Offload(半卸载)
 - o zhonghu
 - o Izc: Simple Mode and Advanced Mode

July 18, 2024

- [yanchaomei] kmesh ebpf UT test proposal
 - Shared BPF_RUN_PROG framework to run bpf in userspace
- [linzihong] Circuit breaker implement
 - Need to further discuss how to reset connection when max connection limit reaches

- [shenkaiwen] performance monitoring proposal
- [zhonghu xu] DNS Request Capture
 - option1: set iptables to redirect request kmesh daemon pod-> kmesh daemon -> coredns
 - may conflict with cni
 - option2: implement a DNS plugin: pod -> coredns->DNS plugin
 - add a standalone component
- dataplane-mode: none, bypass is not needed in kmesh manage mode
 - If we make bypass only work for sidecar, we can cutoff some simulation connect
 - There is a bug checking sidecar enabled or not
 - @yzz: make bypass only work for sidecar, dataplane-mode:
 none can be used to exclude specific pod within a ns

 \circ

- 0.4 new feature documents
- 0.4.1 scheduled tomorrow
 - o two issues left

July 11, 2024

- Izh: circuit breaker proposal
 - maxConnections can be implemented first
 - L7 max requests, error response code evict can be thoroughly thought about.
- Locality lb: cluster: p0{ } -> p1{ }: investigate envoy mechanism and share with us next week
- Next Release Plan(v0.5):
 - o IPv6 in ads, consider if dual stack an be done
 - o Support big scale cluster in ads mode
 - DNS capture: app -> `foo.bar`, kmesh resolve the foo.bar.
 - Istio ServiceEntry.Host allocate ip address
 - o Authorize: offload completely to xdp
 - o E2E: supplement cases
 - ipv6

- pod management
- authz
- traffic management cases
- L7 traces
 - **O->1**
 - provide integration with trace backend, jaeger, zipkin, etc
- Metrics: integration with prometheus, grafana
- Resilience: Kmesh restart persistence, not to lose control during restart/upgrade
 - map structure modified should be carefully considered
- Resilience https://github.com/kmesh-net/kmesh/issues/555
- Resilience workload bpf map update https://github.com/kmesh-net/kmesh/issues/503
- Documents: add docs for existing features
- circuit breaker on connections

July 04, 2024

- [zhangmingyi]kmesh restart :
 - The sequence of daemon deletion and pod deletion is to be confirmed.
- control plant repo
- [tianmuyang] vendor and go version

June 27, 2024

- [yzz] mugen test framework is used to test L7, which can be replaced by e2e, we can keep it until e2e cover these cases
- [wcy] Telemetry: L4 metric collection from kernel
 - o connection metrics can be collected via bpf prog or kprobe
 - long running connection: should we report periodically?
 - we can report periodically
 - global metric report, like connections number, connection latency, error rate on pod granularity
- ipv6 support https://github.com/kmesh-net/kmesh/pull/462
 - o workload mode
 - waypoint decoder should support ipv6 address

0

 authz from waypoint does not work as expected, this is because the src addr is changed to waypoint addr

- o If kmesh support src addr after waypoint, how should we do
- Kmesh cni plugin failed, should we allow pod start up?
 - o Keep in line with other cnis

June 20, 2024

- [xsy]Test results of packet drop when auth processing (https://github.com/kmesh-net/kmesh/pull/424)
 - o performance is greatly affected for short-connect via user-mode auth
 - Next:
 - Analyze whether auth can be implemented in eBPF(L4 auth)
- [mingfa] bpf log print
 - Support print bpf log in user mode/kernel mode via kmesh-daemon parameter in high kernel version.
 - dynamic bpf loglevel adjustment(coordinated with @linzihong)
- [yaozengzeng] E2E Test
 - o Introduces local E2E Test
 - Introduces how to add a tested app
 - o Introduces how to add a new testcase

June 13, 2024

- Reliability of Kmesh restart: Kmesh can auto manage pods after restart
 - Pin map on the node: [mingyi]
 - mount bpf fs in kind container [mingyi]
 - Simulate send in daemon [liwei]
- Dns typed cluster: Kmesh Cluster Definition may need to add endpoints with `hostname`
 - app-> domain2(real domain) -> DNS SE {domain 3, domain4} -> backend shiqi
 - app -> domain1(non exist) -> {endpoint ip addr} lstio: https://istio.io/latest/docs/ops/configuration/traffic-management/dns-proxy/
- Pod enroll / unroll
- bpf log: < 5.13 trace pipe, >= 5.13 export user space though bpf map

•

June 6, 2024

- [nlgwcy] Reliability of Kmesh restart
 - old bpf prog is in detach status if the old connection is still open. does not influence new prog take effect on new connection
 - o bpf map persistent during restart, how should we update map after restart

- option 1: restore user space cache from bpf map after start, then send delta request with local resources; Following step is similar to how we do during reconnect
- option2: send delta request with `*`, and during response handling, we compare directly with bpf map tp update and remove resources
- Kmesh resource bpf prog/map clearing
- [hzxuzhonghu] Waypoint capture work unexpected https://github.com/kmesh-net/kmesh/issues/406
 - Waypoint restart -> service.waypoint update
 - o Service endpoints replicases update
 - Namespace scoped waypoint
 - Pod scoped waypoint
 - Unit test can coverage all this scenarios
- L7 telemetry
 - o L7 Metrics attributes has been added.
 - Trace has not yet tested
 - Accesslog has not yet tested
- L4 telemetry: next week
- Pod level management, lack of ut.
 - o add CNI simulate sending packet in kmesh daemon.
- Dynamic log level

May 30, 2024

- Develop Convention:
 - Big Endian vs Little Endian:
 - Bpf Map key/value choose byte order according to kernel behavior
 - o golang & c
 - https://www.kernel.org/doc/html/v4.10/process/coding-style.html
 - https://github.com/MaJerle/c-code-style
 - golang refer kubernetes guide
- License problem, bpf and ko requires GPL, but we clare apache 2.0
 - https://github.com/kmesh-net/kmesh/issues/366
- DNS Service Routing:

0

- Bpf log user space dump
- Atomatically manage workload during Restart/Upgrade, should not influence application communication
- IPV6 Support : https://github.com/kmesh-net/kmesh/issues/291
 - Confirm whether java application can be managed now?
- Observability:
 - L4 proposal is filed,
- Circuit breaker proposal:
 - o Discuss offline

May 23, 2024

- Certificate Subscribe: @mingyi
 - We may not need priority queue
 - Supplement UT, especially for race test. `go test -race`
- Bpf map size adj:
 - o how many endpoints per service?
 - one listener can contains many filter chains
- Accesslog and metric in eBPF:
 - Provide what is the metric and accesslog look like
 - o How to use it
- · Kmesh auth dynamic update
 - o for workload mode, we now connect with istiod using `ztunnel` role
 - o BigEndian & LittleEndian

May 16, 2024

Attendee:

- li zhencheng
- liuxin
- zhang mingyi
- kang mingfa
- lin zihong
- liu jinyao
- liwei
- matrix
- qi jingyuan
- shenkaiwen
- shenming
- Sliverfish
- tian muyang
- wang
- xie songyang
- yu wenhui
- Intoduce OSPP 2024 projects:

https://summer-ospp.ac.cn/org/orgdetail/f1ea2799-85b8-48c0-ba6f-9de84bbb2ec6?lang=zh

- BPF map size adjust:
 - o support 5000 services, 100,000 workloads
- Bpf map in map optimize:
 - Hierarchy xds structure, one listener can contains many filter chains
 - o optimize proposal is wip
- Certificate Subscribe

May 9, 2024

OSPP 2024:

https://summer-ospp.ac.cn/org/orgdetail/f1ea2799-85b8-48c0-ba6f-9de84bbb2ec6?lang=zh

- [kangmingfa] ConsistentHash LB
 - L7 http header based hash to select backend
 - Consistent hash ebpf prog attach point(skops or veth tc)
- v0.4 features assigned
- v0.3.1 releases:
 - fixed ipv6 authz
 - o domain match in ads mode
 - OE 2303 https://github.com/kmesh-net/kmesh/pull/303
 - o DNS resolve failed from python To be investigated
- Should we continue support OE 2303:
 - Keep temporarily

0

April 25, 2024

- OSPP 2024:
 - We have submitted 8 projects

0

- Retrospect v0.3.0:
 - o Authz
 - Server listen [::]:8080, kmesh authz does not work, can fix today Zhonghu Xu
 - client rst after timeout @tianmuyang @liuxin
 - AuthorizationPolicy does not take effect when updated, can only recreate it to make it work - @tianmuyang @xsy
 - Waypoint and Authz Use Guide
 - File pr to website repo @yaozengzeng
 - Multi spans service access: like a->b->c.
 - a can communicate with b, but kmesh LB does not take effect,
 - b->c is blocked
 - After kmesh restart, workload need to be restarted to be managed by kmesh again
 - Kmesh daemon get node local pods, and load that managed info into bpf map
- Release 0.4 plan
 - Support mtls
 - Istio has introduced new capture model for namespace/service/pod, we may need to investigate how to collaborate with this model
 - L4 access logs metrics
 - Revist L7 accesslogs traces
 - Supplement L4/L7 capabilities test coverage- E2E

- Support graceful upgrade, should not require workload restart after kmesh upgrades
- o Authz should support more dimensions, align with AuthorizationPolicy
- Consistent Hash: L4, L7
- o Accelerate bpf map update
- Use guide documents
- o add more

April 18, 2024

- Authorize: client waits for a long time to get notified and close connection ~1minute
 - socket migration may help
 - prototype verifying
- Waypoint:
 - We need a task guide to show how use waypoint
 - Complete end to end test
- Kind cluster:
 - can support workload mode seamlessly
 - https://github.com/kmesh-net/kmesh/pull/242 may break ads mode
- Bypass {}:
 - kmesh daemon get pod netns, by loop over /proc/{pid}
- 开源之夏:

April 11, 2024

- [liuxin, zengzeng] ebpf->waypoint test
 - waypoint listens on 15019, but workload waypoint's port is 15008
 - ebpf loop limitation, first mock a client to send proxy protocol to waypoint
 - waypoint code forked from istio proxy, to push to kmesh.net/waypoint repo
 - waypoint deployment: image should be changed to kmesh one, but need to have a test
- [Authorization]: check workload take charge by kmesh
- Bypass: `bypass` all or none. Setup iptables in kmesh daemon

March 21, 20240

- [zhonghu] https://github.com/kmesh-net/kmesh/issues/189, kmesh node metadata and id maybe incorrect
 - Incorrect inbound listener
 - Deadloop
 - It takes long time 3 minutes for the policy to take effect
 - Zhonghu and Mingyi.
- [zengzeng] Waypoint can receive and parse TLV, and redirect to upstream cluster
 - create a new repo for waypoint proxy, decoup from envoy
 - cluster patch, support in upstream istio
- [xsy] Authz
 - socket fd migration is a blocker

- alternative option: xdp can send rst to notify peer close
- [mingyi, weibin] Use guide, plan to start this week
- [zhencheng] UT: should cover more complex time serials during communicate with xds server
 - first get to know more about xds
- Kmesh Release: 4.15, 2024

March 21, 2024

- [yaozengzeng] TLV parsing is complete
 - .
 - compatible with waypoint processing for workload.
- [xsy] Authz support part: first support ip blocks
- [mingyi,weibin] Supplement use guide
 - reference: https://istio.io/latest/docs/tasks/traffic-management/request-routing/
- [zhencheng] Controller UT

March 14, 2024

- [yaopzengzeng] waypoint does not support envoyfilter
 - o some types of envoyfilters supported
 - o but cluster 'Add' not take effect
- [xsy] Authz support part: first support ip blocks
 - new connection authz complete 90%
 - o next step is to manage existing connection
- [] Supplement use guide
 - L4 loadbalancer (xds, workload mode) mingyi, weibin
 - o L7 Example on Euler 23.03, HTTP Routes, Weighted LB, LB
- Kmesh and Istio version compatabile matrix mingyi
- Controller UT:
- Twitt https://kmesh.net/en/blog/kmesh_kubeconeu/

March 7, 2024

- [mingyi] Kmesh rds and eds not updated <u>https://github.com/kmesh-net/kmesh/issues/144</u>
 - Have figurred out the root cause: we donot add resource names in the ack request for rds and eds
- [chenmin] Kind can not run kmesh, https://github.com/kmesh-net/kmesh/issues/137
 - multi kmesh daemon in kind shares one bpf map
 - namespace cls(a flag to indicate this pod is controlled by kmesh) need cgroup to distinguish
 - Use single node kind cluster temp
 - Cilium customized a kind image, can we use it?
- [chenmin] Provide a make ut cmd, set up env before hand.

- [liwei] Bypass Proposal: need to supplement pod label fetch solution:
 - https://github.com/kmesh-net/kmesh/pull/148/files
 - o kmesh daemon watch kube-apiserver: filed selector

Feb 29, 2024

- [liwei] Discuss the proposal of bypass.
 - introduce two labels: one controls outbound bypass, one controls inbound bypass
 - pod labels fetch
 - we discussed two options: 1. kmesh daemon watch kube-apiserver 2. implement a kmesh apiserver, reduce load to kube-apiserver
 - to investigate if RTDS fits Zhonghu Xu
 - o CNI
- Kmesh MileStone v0.3
 - Remote L7 proxy: (minimized requirement)Make http plaintext traffic redirected through waypoint
 - L4 Authorization: @muyang
 - How to close connection:
 - new connection, we can close it directly
 - existing connection, if we want to close it, we need to store its fd in userspace or fetch the fd.
 - First implement ip black list

Feb 22, 2024

- v0.2.0 blog @wuchangye
- v0.3 release feature plan
 https://docs.google.com/spreadsheets/d/1gT01 Fns55ZgJiPjuFR-DN Ph9ZIStQVRY
 BI2C7nvyl/edit#gid=0

Feb 1, 2024

- [hzxuzhonghu] UT coverage https://github.com/kmesh-net/kmesh/issues/104
 - how to test BPF code (@changye)
- Build binary and image from docker container
 - o https://github.com/kmesh-net/kmesh/pull/107/files
 - https://github.com/kmesh-net/kmesh/pull/101/files
- [chenmin] Helm install.
- [chemin] CI automatically image build and push
- [changye] Investigate kernel module compatibility issue
- xDS resource cache
- v0.2 release:
 - LB based on workload:
 - o ads refactor: @zengzeng
 - o wds: open pr today @weibin

• Ask me Anything (@changye @hzxuzhonghu)

Jan 25, 2024

- [liwei] Discuss the final effect of make docker.
 - Provide make build and make docker
 - build binaries from docker container according to kernel version and enhanced kernel or not.
 - Compile image should include dependent tools.
 - Kmesh image should support running on a range of kernel visions, e.g. > 5.10
 - helm install (@chenmin)
 - zengzeng: intermediate changes influence code commit, need a command to restore the changed files
- [hzxuzhonghu] Refactor CacheFlush
 https://github.com/kmesh-net/kmesh/blob/main/pkg/cache/v2/flush.go#L34-L42
 - cache flush proposal
- [songyang] Kmesh L4 Authz: how to enforce authorization policy for a established connection
 - We need a proposal
- [yaozengzeng] Kmesh ADS client
- v0.2.0 release scheduled 5th of Feb
 - o features: 1. ads 2. helm install 3. support plaintext communication

Jan 18, 2024

- Added a KEP directory and provide a prototype template
- [zhangwei, wcy] Investigate: Protocol used between kmesh and waypoint
 - TODO: list all the cases, and the expectations from kmesh
- [chenmin] Provide an image used to build kmesh, OWNER: let-bit and we-li https://github.com/kmesh-net/kmesh/issues/76
- [chenmin] Integration test https://github.com/kmesh-net/kmesh/issues/96

•

Jan 11, 2024

- [kwb] Kmesh support xds Workload model
- [zhangwei, wcy] Investigate: Protocol used between kmesh and waypoint
 - L4 -> L7 connecting metadata transport protocol:tlv
 - type: deploymentName="aa" -> t:1(type list);l:sizeof(v);v:"aa"
 - extension type: -> t:USHORT_MAX, I:sizeof(tlv), v:"user defined"
- [wcy] Owner set according to components

• [chenmin] compile & install optimization

Jan 4, 2024

- [wcy] Owner set according to components
- [zhangwei] proxy need some node metadata info, check if these info are included in Workload API, need to check
- [yaozengzeng] Kmesh daemon stand for what role, check if ztunnel works?
 - o workload incsync watch | subscribe when first request
 - o xds fullsync
- [zhangwei, wcy] Investigate: Protocol used between kmesh and waypoint
- [xsy] Investigate Kmesh server side L4 authorization
- [kwb] xds resources subscribe, including `Address`, `Cert` `Authorization`
- Please Assign issues https://github.com/kmesh-net/kmesh/issues

December 28, 2023

- [hzxuzhonghu] We need owner files, then all the future PRs can be merged by kmesh-bot
 - kmesh-bot deploy env (zhonghu)
 - o Divide by components, userspace, kernel, bpf, file an issue
- [hzxuzhonghu] enable organization wide 2FA
- [minchen/mingyi zhang] discuss testing framework to enable functional test on Github action
 - o build and ut can be tested with github action, verified in private repo.
 - o e2e now depends on mugen, which can be run in openEuler only.
 - We need an e2e framework long-term work
- [zhangwei] Fork Envoy to implement a new transport protocol?
- [weibin] L4 Capability need `workload` support, we need to investigate what is still missing.

December 21, 2023

- [hzxuzhonghu] Release v0.1.0 features and TODO tasks.
 - L4 governance capabilities: routing, gray, and load balancing;
 - L7 governance capability: HTTP1.1 routing, gray, and load balancing;
 - SOCKMAP acceleration: TCP acceleration can be performed based on SOCKMAP BPF in traditional sidecar mode;
 - Enable Kmesh based on namespaces;
 - One-click deployment: Image release and one-click deployment of Kmesh based on YAML;
- TODO tasks:
 - V0.1.0 is tentatively released on December 25; Wu Changye
 - Image creation, software package automation, and community issue tracking;
 - Chen Wei/Zhang Mingyi

- The meeting tools are determined before the next meeting and the meeting calendar is determined. Tentatively every Thursday from 4:00 p.m. to 5:00 p.m.; - Xu Zhonghu
- Create a channel under cncf. Complete before the next meeting; Xu
 Zhonghu
- o Introduce the PR robot and CI access control deployment. The robot needs to coordinate the execution machine. Xu Zhonghu